

necessary application forms and attending 1 meeting with the three permitting agencies listed above. All permit fees are assumed to be paid by MRCA.

Assumptions:

- i. The hydrology will be developed from readily available information provided by either Los Angeles County Flood Control or US Army Corps of Engineers.
  - ii. Channel and pier scour calculations will not be required, since the Pacoima Wash channel, in the project reach, has grouted cobble stone banks and a reinforced concrete invert which would be replaced in-kind if in-channel piers are required.
  - iii. No sediment transport modeling or debris yield calculations will be required due to the existing upstream reservoir.
- 2.4. Schematic-Level Planting Plan: The Consultant Team shall prepare a plan including preliminary plant species selection, sizes and plant locations.
- 2.5. Geotechnical Engineering Report: The Geotechnical Subconsultant will perform the necessary field work to establish the geotechnical design parameters for the bikeway section and the proposed pedestrian bridge crossings. Separate geotechnical borings will take place at each side of the Pacoima Wash in each of the three locations of the proposed pedestrian bridges. An additional 2 geotechnical borings will be provided along the bikeway alignment. A geotechnical report will be provided that summarizes the geotechnical borings, summarizes the underlying soil properties, and establishes the geotechnical design parameters and requirements for the final design of the project. No testing will be provided for contaminated soils.
- 2.6. Revised Schematic-level bikeway plan: The Consultant Team shall prepare a revised schematic-level bikeway plan based on the stakeholder and community outreach process.

Task 2.0 Meetings:

- One (1) Schematic Design Presentation

Task 2.0 Deliverables:

- Illustrative Schematic Design Plan
- Schematic-level Bikeway Plan
- Preliminary hydrologic and hydraulic data
- Schematic-level Planting Plan
- Geotechnical Report

### **Task 3.0: Stakeholder and Community Outreach**

The Consultant Team shall work with the MRCA to conduct four (4) total stakeholder outreach meetings and a community outreach program of two (2) total meetings to inform and update project stakeholders and community members about the project and to solicit their feedback.

- 3.1. Stakeholder and Community Contact List: The Consultant Team shall work with the MRCA to develop a contact list of project stakeholders and community members for use in notification for meetings.
- 3.2. Two (2) Stakeholder Outreach Meeting(s) – Analysis and Schematic Design: The Consultant Team shall meet with project stakeholder agencies including the County of Los Angeles County Flood Control District and USACE to present the Programming and Site Analysis and Schematic Design in order to solicit

feedback from these agencies and make any necessary revisions to the project deliverables prior to presenting the same materials to the Community.

3.2.1. Powerpoint Presentation: The Consultant Team shall prepare a powerpoint presentation for use in Stakeholder and Community Outreach meetings. The Consultant Team shall present the presentation to the MRCA for review and comment prior to the Stakeholder and Community Outreach Meetings.

3.3. Community Outreach Meeting No. 1 (Analysis and Schematic Design) Planning and Notification: The Consultant Team shall work with the MRCA to plan and notice the meeting.

3.4. Community Outreach Meeting No. 1 – Analysis and Schematic Design. The Consultant Team shall present the Programming and Site Analysis and Schematic Design Materials to community members to inform them about the current status of the project and to solicit feedback on the Analysis and Schematic Design deliverables for the project.

3.5. Revised Schematic Level Bikeway Plan: The Consultant Team shall incorporate the results of the stakeholder and community outreach process into the Schematic Design plans. (Same as Task 2.6).

3.6. Two (2) Stakeholder Outreach Meeting(s) – 100% Design Development: The Consultant Team shall present the 100% Design Development deliverables to project stakeholders and incorporate their feedback into the drawings.

3.6.1. Powerpoint Presentation: The Consultant Team shall prepare a powerpoint presentation for use in Stakeholder and Community Outreach meetings. The Consultant Team shall present the presentation to the MRCA for review and comment prior to the Stakeholder and Community Outreach Meetings.

3.7. Community Outreach Meeting No. 2 (100% Design Development) Planning and Notification: The Consultant Team shall work with the MRCA to plan and notice the meeting.

3.8. Community Outreach Meeting No. 2 – 100% Design Development: The Consultant Team shall present the 100% Design Development deliverables to the community and incorporate their feedback into drawings.

#### Task 3.0 Meetings:

- Four (4) Stakeholder Outreach Meetings
- Community Outreach Meeting No. 1
- Community Outreach Meeting No. 2

#### Task 3.0 Deliverables:

- Stakeholder and Community Outreach Contact List
- Revised Schematic Design Plans

#### **Task 4.0: Preliminary Environmental Studies**

The Consultant Team will provide environmental documentation to be fully compliant with local, state and federal regulations. The tasks encompass a suite of services to ensure planning and permitting compliance. In association with the overall Environmental Planning Services, CGI will also coordinate with the MRCA and Caltrans.

## 4.1 PRELIMINARY ENVIRONMENTAL INVESTIGATION:

4.1.1 Project Definition and Approach: The CGI team will assist the MRCA in identifying the best project implementation approach and sequencing based upon current project data and results from previous studies. CGI is aware that the project approach and methods for reaching the end goal of project operation can be reached by many different routes. The CGI team is FLEXIBLE and will work with the MRCA at the onset to define the most effective environmental and public involvement approach for the project. Optional creative ideas will be provided by management for various processing scenarios that will ensure an expeditious schedule, the appropriate level of support documentation, and the best means for securing permit approvals. This approach will also take into consideration the available level of engineering design data and the political/ public perception climates.

4.1.2 NEPA Documentation and Clearance: CGI will ensure that all environmental documentation associated with this project and the NEPA environmental process will be performed pursuant to FHWA Standards and consistent with the most recent version of Caltrans' Standard Environmental Reference (SER) and report format guidelines. CGI will complete the External Certifications (Environmental Document Quality Control Review Certification) form for the EA and use approved Annotated Outlines as appropriate.

CGI will provide management and analysis services to complete the NEPA Environmental Assessment (EA) and supporting technical studies (e.g., Natural Environment Study, Biological Assessment, Wetland Delineation Report, Jurisdictional Delineation Report, Noise, Visual and Relocation Impact Technical Memorandums, Section 4(f), Cultural Resource Inventory, Air Quality Analysis, etc.).

The Caltrans environmental experience of the CGI Team will ensure a streamlined preparation of the environmental documentation pursuant to FHWA Standards consistent with Caltrans' Standard Environmental Reference (SER). In addition, the CGI Team's extensive background in regulatory permitting will enable the CGI Team to utilize relationships with local jurisdictions to complete the required permits, coordinate successful meets, and provide leverage during negotiations with the resource agencies.

4.1.3 Existing Data Review and Research: Following the project kick-off meeting, the CGI team will review all available data, including engineering/feasibility studies, environmental studies, planning documents, and engineering studies for the project. CGI will utilize as much existing data as possible and supplement where necessary. We will also use GIS to evaluate the proposed project location prior to any field work. This will allow CGI to determine potential biological and regulatory issues that may exist with the implementation of the project and help in identifying any potential biological or regulatory permitting constraints.

The CGI team will provide a peer review of all technical reports and identify data gaps, additional data needs. Where appropriate, we will outline environmental survey or assessment constraints, such as seasonal survey limitations and compatibility with the project schedule.

- 4.1.4 Preliminary Environmental Study: After review of the current data and refinement of the project description, CGI will perform a preliminary environmental study (PES) and form pursuant to the CalTrans Local Assistance Procedures Manual (LAPM Chapter 6, Exhibit 6-B). The purpose of the PES is to determine the potential presence of sensitive environmental resources within the project area. Based on the results of the PES, CGI will, in consultation with MLA and MRCA, determine the proper level of review under CalTrans guidelines and NEPA requirements.

Notwithstanding the results of the PES, and based on the current project description and our many years of experience, CGI believes the appropriate level of review under NEPA for the project is likely to be an Environmental Assessment (EA). Therefore, our objective is the approval of this project with an EA leading to a Finding of No Significant Impact (FONSI) under NEPA. For approval with a FONSI, all project impacts must be mitigated below a level of significance. If one or more impacts remain significant after mitigation, an Environmental Impact Statement must be prepared under NEPA. Our preliminary opinion is that the project can be approved under an EA.

The balance of this proposal assumes that the project will be approved with a FONSI. In support of the NEPA approval process, CGI will also prepare application materials and coordinate the permitting process through the Army Corps of Engineers (ACOE), the Regional Water Quality Control Board (RWQCB), the California Department of Fish and Game (CDFG), and the U.S. Fish and Wildlife Services.

## 4.2 CONDUCT TECHNICAL STUDIES

Based on the PES, CGI will recommend additional technical studies as needed, and recommend the appropriate level of NEPA documentation needed for the project. Additional technical studies will likely include the following:

- 4.2.1 Air Quality and Global Climate Change: As needed, CGI will conduct air quality analysis and global climate change documentation consistent with Caltrans SER guidelines for inclusion in air quality and climate change-related discussion in the Environmental Assessment, to include a Section 6004 conformity finding, as an identified requirement in the PES form.
- 4.2.2 Biology: The CGI Team will prepare the following biological documents to comply with current Caltrans requirements.

Natural Environment Study (NES): CGI will conduct a Natural Environment Study (NES) to describe the existing biological environment within the project area and how the project alternatives affect that environment. The NES will summarize technical documents (e.g., focused species studies, wetland assessments, biological assessments, etc.) related to effects on biological resources in the Biological Study Area (BSA) for use in the environmental document.

Based on the results of the NES, CGI will determine the likely presence or absence of any threatened or endangered species that may be affected by the project. If listed species may be involved a Biological Assessment must be prepared. The U.S. Fish and Wildlife Service (USFWS) defines Biological Assessment as "...the information prepared by or under the direction of the Federal agency concerning listed and proposed species and designated and

proposed critical habitat that may be present in the action area and the evaluation of the potential effects of the action on such species and habitat". Caltrans has expanded this definition to also include those species listed by the California Department of Fish and Wildlife (CDFW).

If a biological assessment is required, CGI will prepare the BA in accordance with USFWS and CDFW guidelines.

**Biological Agency Coordination:** CGI will coordinate biological issues with the resource agencies, including proposed mitigation for impacts to sensitive species and habitats, mitigation success criteria, long-term monitoring plans and development of discretionary permit conditions. It is anticipated that agency coordination and Section 7 consultation with USFWS will be required, as well as response to agency concerns expressed during consultation and coordination.

- 4.2.3 **Cultural:** CGI will prepare a determination of area of potential effect (APE) for the project based on the results of the initial review of existing data and the information provided through the PES. We will document all relevant cultural and historic resources and provide a Section 106 consultation support services in compliance with the CalTrans Standard Environmental Reference (SER) Guidelines, as needed.

CGI will provide a systematic archaeological and built environment field survey of the project Area of Potential Effect (APE), described here as the proposed new Pacoima Wash Mountain parkway Project, plus a 50-foot buffer. The project area will be visually examined by Chambers Group cultural resources specialists for the presence of:

- Prehistoric artifacts (e.g., flaked stone tools)
- Tool-making debris, stone milling tools
- Historic artifacts (e.g., metal, glass, ceramics)
- Sediment discoloration that might indicate the presence of a cultural midden
- Depressions and other features indicative of the former presence of structures or buildings (e.g., post holes, foundations),
- Built environment resources (e.g. bridges, water conveyance systems).

Cultural resources encountered during the survey will be mapped using a Trimble Geographic Positioning System (GPS) unit and recorded on State of California Department of Parks and Recreation (DPR) 523 forms. Survey methodology, identification, and recordation will follow State Historic Preservation Office (SHPO) guidelines

In addition, a Section 4(f) Evaluation will likely be required to be completed for the project with the anticipation of a *De Minimis* Finding. The Section 4(f) *De Minimis* Finding report will be prepared consistent with the requirements detailed in the Caltrans SER Guidelines.

**Cultural Resources Survey Report:** The report will be prepared according to County of Los Angeles and California SHPO guidelines, and will describe the literature searches, methods used, results of the field survey, as well as NRHP and CRHR eligibility recommendations. The report will contain a summary of the environmental setting and cultural background of the

project area, including prehistory and history. If archaeological sites and/or historic period built environment resources are encountered, a historic context will be developed and NRHP/CRHR-eligibilities will be recommended. The sites will be described in detail and the records for new and updated sites will be provided as a confidential appendix. It is assumed that no more than one set of comments that will require incorporation into the final draft of the report will be received from the MRCA.

- 4.2.4 Jurisdictional Delineation: CGI will perform a jurisdictional delineation to determine jurisdictional “waters of the United States” and “waters of the State” (including wetlands), located within the boundaries of the proposed impact areas. CGI’s delineation is in compliance with the most recent U.S. Supreme Court decision, *Rapanos v. United States* and *Carabell v. United States*, which resulted in changes to Corps jurisdictional authority after June 2007. We will document existing conditions and jurisdictional areas. The delineation will result in:

A determination of the Corps’ ordinary high water mark (OHWM) and indicate the existence of any three (3) parameter wetlands on-site. The actual presence or absence of wetlands on-site will be verified through the determination of the presence of hydrologic conditions, hydrophytic vegetation, and hydric soils pursuant to the September 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). The delineation findings will be based on the assumption that a Preliminary Jurisdictional Determination will be pursued with the Corps;

The CDFG’s jurisdiction being identified via the top of bank of the on-site streambed or to the outer drip line of riparian vegetation (if present) pursuant to the 1994 CDFG Field Guide to Lake and Streambed Alteration Agreements. In cases where isolated and/or *Rapanos* conditions are present; the JD will identify areas under the jurisdiction of the Regional Board.

Once CGI conducts a site visit and the project site baseline information is obtained, CGI will prepare a comprehensive written report discussing on-site jurisdictional areas. The JD report shall be consistent with the most recent Caltrans SER *Wetland Delineation and Assessment Report Format* guidelines.

- 4.2.5 Noise: CGI will prepare a Noise Impact Technical Memorandum as required by the Preliminary Environmental Studies (PES) Form. According to the PES Form, a noise study is not needed for this project, however, due to the project’s proximity to noise sensitive land use, a brief technical memorandum discussing construction noise abatement measures is required. The technical memorandum will discuss the types of construction activity and equipment, the duration of construction, and potential sensitive receiving properties. Memo content will adhere to Section 7-1.011, 5-1 of Caltrans’ Sound Control Requirements, and compliance to local and state noise requirements will be analyzed and discussed.
- 4.2.6 Relocation Impacts: The Preliminary Environmental Studies (PES) Form states the project will not require relocation of residential or business properties, however, will require new right-of-way and possible relocation of public utilities. As such, a Relocation Impact Memorandum with Caltrans right-of-way approval is necessary. The memo will be completed in accordance

with Caltrans guidelines and will follow the format provided in Caltrans Right-of-Way Manual, Chapter 10, Section 10.05.00.00, Exhibit 10-EX-3.

#### 4.3 Environmental Assessment

Utilizing the environmental analysis of the technical studies, CGI will prepare an Environmental Assessment (EA), consistent with the SER Guidelines. Preparation of the EA will include the following work efforts:

- 4.3.1 **Draft Preliminary Environmental Evaluation:** Working in consultation with the relevant agencies, CGI will prepare a draft statement of NEPA purpose and need and a project description. The establishment of purpose and need along with the project description are critical to the success of the project. The purpose and need/project objectives will require approval by the MRCA and Caltrans.

This scope of work is based upon a no-build and up to three build alternatives. CGI will prepare the Environmental Assessment (EA) per Caltrans SER and FHWA guidelines; its format will be determined in discussions with the agencies.

**Final Preliminary Environmental Evaluation:** CGI will incorporate the MRCA and Caltrans comments into the Environmental Evaluation.

**Notice of Initiation of Studies (NOIS):** CGI will prepare the notices of preparation of an environmental document required by NEPA, and Caltrans for local, State and federal agencies and the general public. CGI will prepare a Caltrans Notice of Initiation of Studies (NOIS) for review by the MRCA and Caltrans and will distribute it by certified mail. If requested, CGI will arrange a public meeting to initiate the public input.

**Screencheck Draft Environmental Document:** CGI will incorporate the purpose and need/project description into the screencheck document, and use data from the required technical studies, and any other relevant available data, to complete each resource area analysis.

The EA will determine the following:

- Whether the project will have any significant adverse effects on the environment under both state and federal standards
- What potential mitigation measures are appropriate for such impacts
- Whether the mitigation measures reduce all impacts below a level of significance

CGI will provide the Screencheck EA to agencies for review and comment, then revise it in response to the agencies' comments; then, a revised Screencheck EA will be provided to the agencies for review and comment, and it will be revised again in response to the agencies' comments.

**Draft Environmental Document:** Based on the previous task, CGI will draft the EA for public review. The critical objective of the EA is to provide the general public and responsible agencies with the means to participate in the environmental process via written comments on issues addressed in the EA. CGI will prepare the requisite public notices under State and

federal law for distribution of the EA. CGI will prepare the requisite number of copies of the document itself, accompanied by its technical documents; most copies likely will be in a CD format. CGI will coordinate the preparation of the distribution list with the MRCA and Caltrans, and the firm assumes that the agencies will distribute the document.

**Public Meeting:** Public meetings are optional, but highly encouraged under the Caltrans process for an EA. Due to the community and resource agency sensitivity, the following tasks are recommended:

**Informational Meetings:** CGI, the MRCA and Caltrans would host up to one (1) informational meeting on the Draft EA. The meeting would communicate the project's (preliminary) purpose, process, status, and would solicit early agency and public input. In cooperation with the MRCA, CGI would arrange a suitable location for the informational meetings.

**Meeting Materials and Presentation Boards:** CGI would prepare meeting materials and presentation boards for the informational meeting. The meeting materials will consist of an agenda, sign-in sheets, fill-in question cards, informational fact sheets, etc. CGI would prepare presentation boards showing the project alternatives. The project's engineering firm will provide conceptual engineering support, survey and aerial mapping to define preliminary route alternatives for the public. Prior to public meetings, all meeting materials will be presented to the MRCA and Caltrans for review and approval.

**Advertise Informational Meetings:** If determined to be necessary, CGI would prepare project notifications, in Caltrans-approved format, for publication in two (2) local newspapers of the MRCA's and Caltrans' choice. The advertisements will be one-quarter page and will run consecutively for two (2) days. CGI would arrange advertising using the MRCA's or Caltrans governmental rates for public notification, which will be billed to the MRCA.

**Record Public and Agency Involvement:** CGI would prepare a Record of Public and Agency Involvement that will include letters and agency correspondence, and that will address comments and issues brought up during the informational meetings.

**Responses to Comments:** At the close of the public review period for the EA, CGI would meet with Caltrans staff to review any received comments on the EA and to discuss potential responses to these comments. Then, CGI would formulate responses to the comments and submit the response document to the agencies for review and comment. The agencies' comments will be incorporated into the Response to Comments document, which will be submitted to Caltrans as an appendix to the EA for use in public hearings.

**Mitigation Monitoring Program/Environmental Commitments Record:** Prior to MRCA approval, CGI will prepare a mitigation monitoring plan/environmental commitments record, including monitoring forms, to assist the MRCA in implementing the mitigation measures contained in the EA.

**Final Administrative Record:** Prior to Caltrans action on the EA, CGI will assist the MRCA and Caltrans to prepare appropriate Administrative Record.



**Prepare Finding of No Significant Impact (FONSI):** Following public review of the EA, CGI will prepare a FONSI. The final steps in the NEPA process are dependent on Caltrans/FHWA procedures and any agreements with the cooperating agencies. CGI would assist Caltrans in the completion of the federal process that would include preparation of a Draft FONSI for agency use.

#### 4.4 COORDINATION

4.1.1 **Agency Coordination:** CGI will coordinate with appropriate agencies through PDT meetings, an agency scoping meeting, and direct contact. Concerns and issues expressed by agency representatives will be documented in a database to ensure that expressed concerns are recorded, communicated to the full PDT, and addressed. The following agencies are likely to be among those included in the coordination effort: County of Los Angeles, Caltrans, U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG), Regional Water Quality Control Board (RWQCB), the State Historic Preservation Office (SHPO), and US Fish and Wildlife Service (USFWS).

CGI shall coordinate an on-site meeting with the ACOE, Regional Board, and CDFG at the appropriate time to review the delineation and discuss potential permitting strategies. It is crucial to obtain agency concurrence and/or feedback from the regulatory agencies prior to the application process. CGI has found these Pre-Application Field Meetings to be extremely beneficial with regards to avoiding or streamlining the permitting process.

Consultation and coordination will be required among the applicant, project team, and involved regulatory agencies during the review of application materials. Following submittal of the applications, CGI will coordinate with the involved regulatory agencies to respond to agency questions and submit any additional information that may be requested. We have assumed that coordination will take place primarily by telephone, fax, and mail. During this process, CGI will coordinate closely with the project team with regard to any agency concerns, questions, or request for additional materials that may arise.

**Coordination with MRCA:** CGI will prepare for and attend meetings as necessary with the MRCA regarding environmental processing of documents, resolution of issues, strategy development, etc.

**Project Coordination and PDT Meetings:** CGI will prepare for and attend meetings of the Project Development Team (PDT).

**Coordination with Caltrans District 7:** CGI will coordinate with the Caltrans District 7 Environmental Office in order to prepare and process the appropriate and necessary documentation.

#### 4.5 PERMITS

CGI will obtain all necessary environmental (regulatory) permits for the project. CGI will prepare and process applications for project permits required for compliance with Sections 401 and 404 of the Federal Clean Water Act, and Section 1602 Agreements. Section 401 permits are under the regulatory authority of the RWQCB; Section 401 certifications are under the U.S. Army Corps of Engineers (ACOE); Section 1602 Agreements are

under the California Department of Fish and Game (CDFG). Section 7 Consultation falls under the regulatory authority of the U.S. Fish and Wildlife Service (USFWS).

Based on the results of the jurisdictional determination and the outcome of the initial coordination with the involved agencies, CGI will prepare and submit the necessary permit application materials. CGI anticipates the following actions:

- The Corps will provide Section 404 authorization under a NWP.
- The RWQCB will issue Section 401 Water Quality Certification.
- The CDFG will issue a 1602 Agreement.

This scope is based upon the assumption that the project will qualify for a Corps Nationwide Permit. Under the Nationwide Permit (NWP) program. It is assumed that authorization to proceed from the ACOE can be achieved via Nationwide Permit (NWP) 14, *Linear Transportation Projects*. Until the jurisdictional delineation and the NES have been completed, the cost for permitting actions cannot be accurately estimated. Based on a preliminary field review, CGI believes that the project would qualify for an NWP.

#### Task 4.0 Meetings:

- One (1) Client Meeting
- Coordination Meetings
- One (1) Public Hearing

#### Task 4.0 Deliverables:

- Chambers Group to list each discreet deliverable/report

### **Task 5.0: Preliminary Right-of-Way Engineering and Investigations Necessary to Complete Environmental Document**

- 5.1. Preliminary ROW Engineering and Investigations and ROW Map: To determine any additional Right-of-Way required to construct and complete the project, the project team will review available County Assessor data and create a preliminary Right-of-Way map showing ownership of adjacent parcels. This preliminary right-of-way map will be verified during the final design stage of the project along with an agency provided Title Report in order to properly delineate the adjacent property lines.
- 5.2. Additional ROW Engineering: During the final design phase of the project, additional right-of-way engineering may be needed to obtain easements, temporary construction easements, and other legal access in order to construct the project. Due to the uncertainty of the project alignment at this time, these additional services will be provided under separate agreement after the preliminary Right-of-Way Engineering phase.

#### Task 5.0 Meetings:

- Attendance at 1 project meeting to discuss potential Right-of-Way impacts

#### Task 5.0 Deliverables:

- Preliminary Right-of-Way map showing the Pacoima Wash Right-of-Way, adjacent property lines and the ownership of adjacent parcels. Map will be provided in PDF and AutoCAD format.

**Task 6.0: Topographical Survey**

6.1. Topographical Survey: Once the project limits are established at the early stages of the project, the Consultant Team shall prepare a topographical survey of the project area for use in preparing the Schematic Design and Construction Plans for the project. The Topographic Survey will be comprised of two major portions; ground survey and aerial photogrammetry. The ground survey will establish horizontal and vertical control for the approximate 3.25 mile long segment of Pacoima Wash to be surveyed. An aerial survey will then be performed to obtain a 40 scale, 1 foot contour interval topographic map of an approximate 250' wide strip of the wash and surrounding area. Additional ground survey will be performed to fill in any gaps in the aerial survey and to also survey more accurately the locations of the pedestrian bridges.

## Task 6.0 Meetings:

- Pre-site Survey with MRCA and applicable team members

## Task 6.0 Deliverables:

- Copies of the aerial photographs in hard and PDF form along with an AutoCAD version of the topographic map will be provided to the rest of the team for use during the project and also provided to MRCA for their use.

**Task 7.0: Engineered Construction Plans, Specifications and Estimate (PS&E)**

- 7.1. 100% Design Development Plans, Specifications and Cost Estimate: The Consultant Team shall prepare DD-level plans, specifications and Cost Estimate for the following disciplines: Civil, Structural, Electrical, Planting, Irrigation.
- 7.2. 100% Construction Documents Plans, Final Specifications and Cost Estimate: The Consultant Team shall prepare CD-level plans, specifications and Cost Estimate for the following disciplines: Civil, Structural, Electrical, Planting, Irrigation.

## Task 7.0 Meetings:

- 100% Design Development Presentation
- 100% Construction Documents Presentation

## Task 7.0 Deliverables:

- 100% Design Development Drawings, Specifications and Cost Estimate
- 100% Construction Documents, Specifications and Cost Estimate

**Task 8.0: Permitting Duration**

8.1. Plan Check Submittal and Plan Review: The Consultant Team shall submit the 100% Construction Documents to the appropriate agencies for review. Agencies shall include: the City of Los Angeles, the City of San Fernando, the County of Los Angeles Flood Control District, and the US Army Corps of Engineers.

- 8.2. Plan Check Corrections: The Consultant Team shall revise the documents for re-submittal to the appropriate agencies for approval.
- 8.3. Re-Submittal and Review: The Consultant Team shall prepare the documents for re-submittal to the appropriate agencies for approval.

### Task 8.0 Meetings:

- Schematic Design Preliminary Review meeting(s)
- Design Development Preliminary Review meeting(s)
- Plan Check Submittal meeting

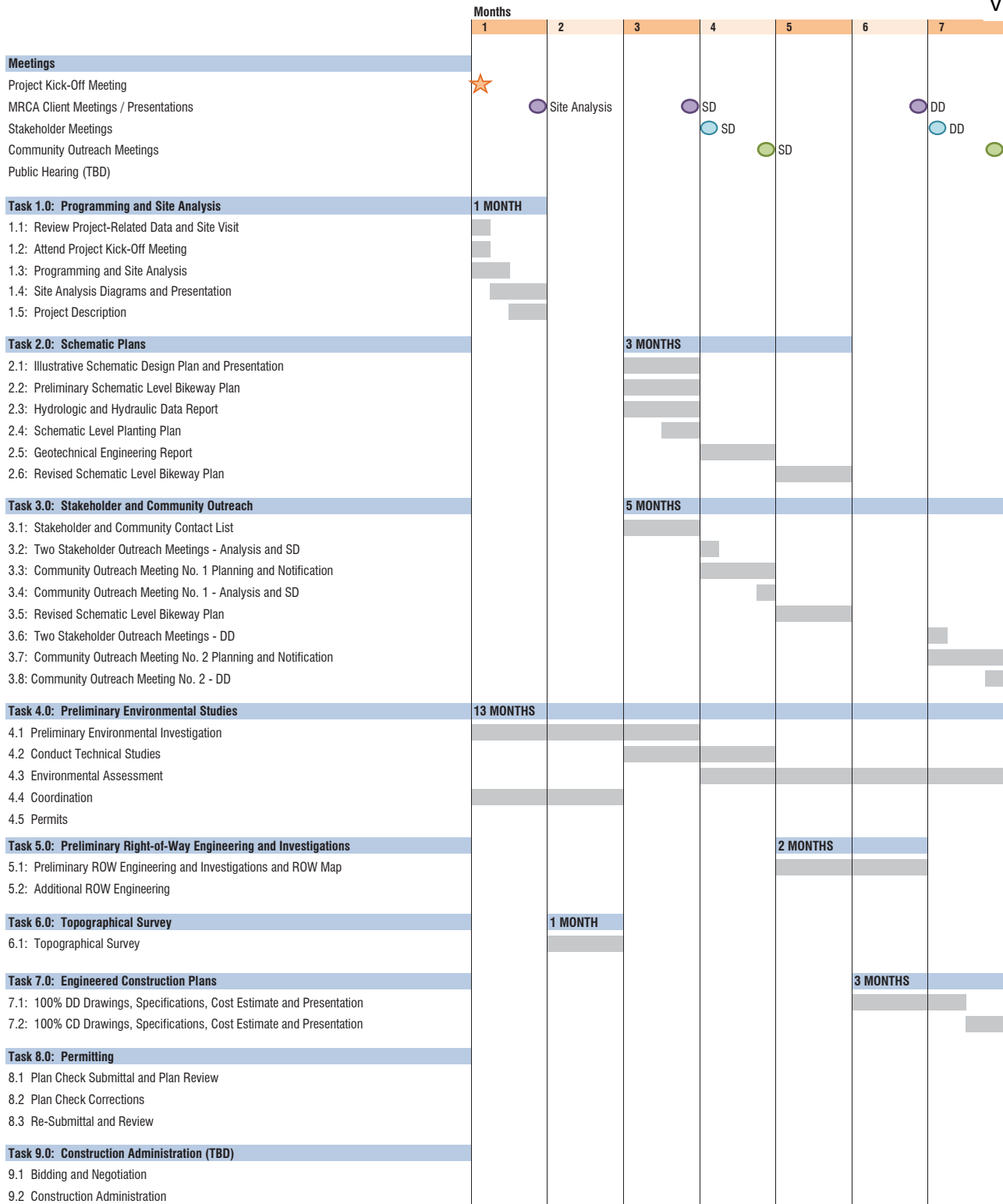
### Task 8.0 Deliverables:

- Plan Check Set
- Plan Check Corrections

### **Task 9.0 Construction Administration**

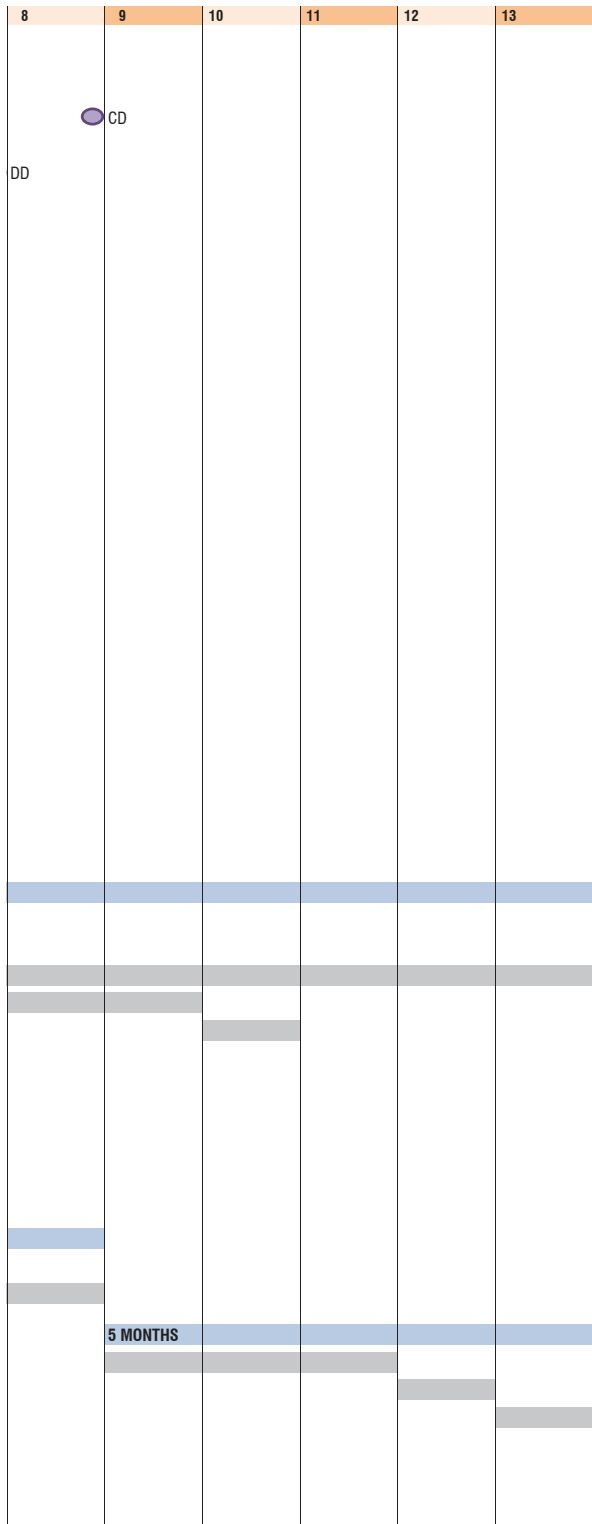
If desired, the Consultant Team shall assist the MRCA with administrating construction of the scope of work including the Class I bike path, proposed bridge crossings and associated features. The scope of work for Construction Administration includes:

- 9.1. Bidding and Negotiation: The Consultant Team shall attend a pre-bid meeting, and prepare responses to bidders' RFI's.
- 9.2. Construction Administration: The Consultant Team shall provide construction administration services including: reviewing product submittals and shop drawings, responding to contractor's RFI's, site visits and site documentation, punch list and final job walk.



# Project Schedule

MRCA  
Attachment  
3/13/14  
VI(f)



# 06

**APPENDIX:  
PROJECT TEAM RESUMES**

**Jeff Hutchins, RLA, ASLA, CLIA, Principal**

**EDUCATION**

California State Polytechnic  
University, Pomona  
*Bachelor of Science in Landscape  
Architecture, 1990*

**PROFESSIONAL LICENSES**

California, #3815

Certified Landscape Irrigation  
Auditor, #7920

**ORGANIZATIONS**

American Society of  
Landscape Architects, *Member  
VP programs 2013 Southern  
California Chapter*

UCLA Landscape Architecture  
Extension, *Advisory Board*

Cal Poly Pomona Landscape  
Architecture, *Advisory Board*

**PREVIOUS PARTICIPATION**

ASLA Southern California  
Chapter, *Treasurer*

La Verne Land Conservancy,  
*Director*

San Gabriel Mountains Regional  
Conservancy, *Director*

*Jeff Hutchins has over 25 years of experience as a landscape architect and is also a Certified Landscape Irrigation Auditor. Mr. Hutchins has led the design and implementation of a variety of large-scale projects including comprehensive master planning, developments for individual park sites and streetscape improvements, and has been responsible for Master Plan project management, irrigation design, quality assurance and construction administration services. Mr. Hutchins' extensive construction knowledge aides in the production of economic, and efficient construction documents. He currently performs landscape plan review for the City of Azusa.*

*Mr. Hutchins has also served as a city landscape architect to the Cities of San Dimas, San Gabriel, La Verne, and West Covina providing design review, plan check services, ordinance writing, and advisory services for tree protection programs, street tree programs and maintenance guidelines. He is committed to sustainable mobility and watershed planning and applying sustainable principles to project design.*

**PROFESSIONAL EXPERIENCE**

2005-Present Mia Lehrer + Associates, *Associate, Principal*  
2001-2005 California Landscape & Design, *Lead Landscape Architect*  
1995-2001 Lawrence R. Moss and Associates  
*Associate, Project Manager*  
1990-1995 Mia Lehrer + Assoc., *Landscape Designer, Drafter*  
1987-1990 Stone & May Landscape Architects, *Designer/Drafter*  
1986-1987 Florian Martinez and Associates, *Drafter*

**PROJECT EXPERIENCE**

101 Hollywood Freeway Ramps Environmental Enhancement – LA, CA  
Alamo River Trail Project – Holtville, CA  
Central Region Elementary School #21 – Los Angeles, CA  
Compton Creek Master Plan – Compton, CA  
Diamond Elementary School – Santa Ana, CA  
Eastern Avenue Streetscapes – Los Angeles, CA  
EXPO Buffer Park – Santa Monica, CA  
Faith and Hope Park – Los Angeles, CA  
Flagstaff BMX Park – Flagstaff, AZ  
Gerald Desmond Bridge Highway Planting – Long Beach, CA  
Greenville Elementary School – Santa Ana, CA  
Hillcrest Park Master Plan – Fullerton, CA  
Integrated Medicine Center – Los Angeles, CA  
Ivar Park – Los Angeles, CA  
Kennedy Elementary School – Santa Ana, CA  
Lemon Creek Restoration – Walnut, CA  
Lowell Elementary School – Santa Ana, CA  
Los Angeles Mission College East Campus – Sylmar, CA  
Los Angeles Mission College Family Guidance Center – Sylmar, CA  
Los Angeles Mission College Media Arts Center – Sylmar, CA  
Los Angeles Mission College Physical Education Building – Sylmar, CA



**Jeff Hutchins, RLA, ASLA, CLIA, Principal****PROJECT EXPERIENCE (CONTINUED)**

Los Angeles Mission College Student Services – Sylmar, CA  
 Los Angeles Riverfront Greenway Phase II – Studio City, CA.  
 Los Angeles World Airports Bradley West Project – Los Angeles, CA  
 Los Angeles Zoo Parking Lot – Los Angeles, CA  
 Natural History Museum Nature Gardens – Los Angeles, CA  
 Owens Lake Dust Mitigation Program Phase 7a – Lone Pine, CA  
 Patton Park – Los Angeles, CA  
 Peck Park Canyon Trail – San Pedro, CA  
 Pierce College South Campus Improvements – Woodland Hills, CA  
 Pierce College South, East Parking Lot – Woodland Hills, CA  
 Pitzer College Residential Life Phase II – Claremont, CA  
 Plan Check Services, Rosedale Specific Plan – Azusa, CA  
 South Los Angeles Wetland Park – Los Angeles, CA  
 South Region High School #2 – Los Angeles, CA  
 Temple Athletic Field – Los Angeles, CA.  
 The Village Mixed Use Development – Santa Monica, CA  
 Tri City Park Master Plan – Placentia, CA  
 Veterans Administration Seismic Renovations – Los Angeles, CA  
 Vista Hermosa Natural Park – Los Angeles, CA  
 Westside Rainwater Park – Los Angeles, CA  
 Woodbury Avenue Streetscape – Los Angeles, CA

**PREVIOUS PROJECT EXPERIENCE**

Campus Ave, 9th St and 2nd Ave Streetscape – Upland, CA  
 Caltrans Foothill Blvd. Median Design – La Verne, CA  
 Caltrans Slopes – San Dimas, CA  
 Mission College Arroyo – Sylmar, CA  
 Equestrian Centers – SGMRC Equestrian Center, Location TBD  
 Marsh Street Park, Habitat Restoration – Los Angeles, CA  
 Lawton Skate Park – Indiana  
 Hawkins Park Park Design – MRCA, Los Angeles  
 Valley Park Park Specific Plans – Burbank, CA  
 Fontana Skate Park Design – Fontana, CA  
 Santa Monica Skate Park Design – Santa Monica, CA  
 Streetscape Design – Foothill Boulevard, Downtown Upland  
 Arroyo Nature Park Trail Systems – MRCA, South Pasadena

**Jan Dyer, RLA, ASLA, Principal****EDUCATION**

University of California at Los Angeles, Extension, *Professional Designation Certificate, Landscape Architecture, 2006*

**PROFESSIONAL LICENSES**

CALIFORNIA #5623

**ORGANIZATIONS**

American Society of Landscape Architects, *Member*

Urban Land Institute, *Member*

Southern California Planning Congress, *Board of Directors*

*Jan Dyer has led project teams on various watershed, civic master plan, park design and higher education projects, responsible for project design through construction administration. Ms. Dyer provides creative and sustainable leadership in project design and excellent project management skills to all phases of projects. She is committed to the community design process and has facilitated numerous outreach meetings for the firm. She has been the Project Manager for several Los Angeles World Airport projects and many Los Angeles Community College District projects including three currently under construction at Mission College in Sylmar.*

**PROFESSIONAL EXPERIENCE**

2007-present Mia Lehrer + Associates, *Principal*  
2005-2006 LA Group, *Project Manager and Design Associate*  
2004-2005 James Dean ASLA, *Sr. Project Manager*  
1991-2004 Borstein Enterprises, *Project Mgr. & Property Mgr.*

**TEACHING EXPERIENCE**

2005- 2009, CA State University, Dept. of Extended Learning, Northridge, CA, *Landscape Design Certificate Program*  
2009-Present, University of California at Los Angeles, Extension Landscape Architecture Program

**PROJECT EXPERIENCE**

Atwater Bridge – Los Angeles, CA  
Biotech Campus Mission Garden – Thousand Oaks, CA  
Biotech Campus Building 21 – Thousand Oaks, CA  
Biotech Campus Parking Structure 8 – Thousand Oaks, CA  
Biotech Campus Building 51 Soccer Field – Thousand Oaks, CA  
Compton Creek Earthen Bottom Feasibility Study – Compton, CA  
East Los Angeles Transit Oriented District Specific Plan – LA, CA  
Gerald Desmond Bridge Visual Quality Management – Long Beach, CA  
Jordan Downs Public Housing Master Plan – LA, CA  
Los Angeles Dept of Rec & Parks Citywide Needs Assessment – LA, CA  
Los Angeles Mission College East Campus – Sylmar, CA  
Los Angeles Mission College Family Guidance Center – Sylmar, CA  
Los Angeles Mission College Media Arts Center – Sylmar, CA  
Los Angeles Mission College Physical Education Building – Sylmar, CA  
Los Angeles Mission College Student Services – Sylmar, CA  
Los Angeles World Airports Bradley West Project – Los Angeles, CA  
Owens Lake Dust Mitigation Program Phase 7a – Lone Pine, CA  
Piggyback Yard Conceptual Master Plan – Los Angeles, CA  
Pitzer College Residential Life Phase II – Claremont, CA  
San Gabriel, Greening the Code – San Gabriel, CA  
Sony Studios, Main Street Schematic Design – Culver City, CA  
Strathmore Multi-Unit Housing at UCLA – Los Angeles, CA  
Thermal Property Master Plan – Indio, CA  
UCLA Teaching and Learning Center for Health Services – LA, CA  
Ventura Botanical Gardens Vision Plan – Ventura, CA

**Xiaoye Zhang, Project Designer****EDUCATION**

University of Southern California  
Los Angeles, CA  
Master of Landscape Architecture  
2009

Beijing Forestry University  
Beijing, China  
Master of Landscape Architecture  
2008

Beijing Forestry University  
Beijing, China  
Bachelor of Landscape Architecture  
2005

**ORGANIZATIONS**

Association for Women in  
Architecture + Design (AWA)

**AWARDS | COMPETITIONS**

2009  
WPA 2.0 Finalist

*Xiaoye Zhang is a landscape designer who has completed Landscape Architecture Masters Degree programs from both the University of Southern California and Beijing Forestry University. She has worked on a wide range of projects throughout China and the United States including public open space, waterfront parks, residential communities of all scales, national Forestry park, mix-used projects, World Horticultural Expo sites, hotels, retail and mixed use developments. These projects have enabled her to expand her experiences, knowledge and pioneering values that blend sustainability, environmental and cultural diversity.*

**PROFESSIONAL EXPERIENCE**

2012-Present Mia Lehrer + Associates, Los Angeles, CA  
2010-2012 ValleyCrest Design Group, Calabasas, CA  
2005-2007 Beijing Beilin Horizon Landscape Planning & Design Institute, Beijing, China

**PROJECT EXPERIENCE**

Banco Agricola Master Plan – San Salvador, El Salvador  
Beverly Gardens Park Restoration Plan – Beverly Hills, CA  
Dodgers Stadium Site Improvements – Los Angeles, CA  
Expo Buffer Park – Santa Monica, CA  
Ivar Property – Hollywood, CA  
Universal Studios, Area Attraction – Universal City, CA

**PREVIOUS PROJECT EXPERIENCE**

Chongming Bailian Retail Mix-Use – Chongming, China  
City Park Mixed Use Development – Huainan, Anhui, China  
Culver City Warner Drive Office Building – Culver City, CA  
Harbor Regional Health Center – Torrance, California  
Hunhe Waterfront Park – Shenyang, China  
Irwin Residence – Santa Monica, CA  
Naiman Residence – San Diego, CA  
Nanjing Sanpao Commercial Headquarters – Nanjing, China  
Qiandao Lake Hotel and Villa Development – Qiandao Lake, China  
Qinhuangdao National Forest Park – Qinhuangdao, China  
Restoration of Natural Sightseeing Park – Beidaihe, China  
Rizhao Linyi Road Streetscape – Rizhao, China  
Shaolin Temple Shaoxi River Reservation – Dengfeng, China  
Yacoub Residence – Calabasas, CA  
Yiwu Zhanqian Park – Yiwu, China  
2014 World Horticulture Expo Plan – Qingdao, China



**Jason Fussel, PE, PLS, LEED® AP, QSD/QSP**  
Project Engineer/Surveyor

Mr. Fussel has been a member of the Tetra Tech team for over ten years and has a broad knowledge of civil engineering stemming from his involvement in a variety of residential, educational and federal projects. His experience includes work on both public and private sector jobs of varying size and construction material types including the design of sewer transmission systems, water distribution systems, street and storm drain improvements and grading activities varying from mass grading to final precise grading plans. Mr. Fussel’s strengths include stormwater analysis, studies, design, preparation of specifications, bid documents and cost estimates, and construction support services.

Mr. Fussel has extensive and relevant experience in the stormwater and Best Management Practice (BMP) arena, which includes successful implementation of sustainable design practices for a vast array of improvement projects. Mr. Fussel’s significant involvement in Low Impact Development (LID) and Stormwater Pollution Prevention and reduction projects in Southern California, specifically as Engineer of Record for two important Proposition “O” projects for the City of Los Angeles, provide the foundation for his continued leadership in the industry. Mr. Fussel continues to improve upon his expertise through attending various LID conferences and presenting the fundamentals and approach to BMP design, to colleagues and the public through engagement seminars and discussions. As a Qualified SWPPP Practitioner (QSP) and Qualified SWPPP Developer (QSD), Mr. Fussel has ample experience with providing Stormwater Pollution Prevention Plans (SWPPP) for construction activities and Water Quality Management Plans (WQMP).

Mr. Fussel is also experienced with providing comprehensive site surveys which have been critical to design of access and arterial roads for large projects. Mr. Fussel is well versed in managing all survey tasks for stormwater quality enhancement projects, wind energy projects, and federal DoD projects. Mr. Fussel’s responsibilities have included conducting aerial and topographic surveys, utility surveys, Record of Surveys, ALTA surveys, and coordination of aerial topography.

**EXPERIENCE**

**Shell Beach Road Streetscape Phase I Project, City of Pismo Beach, Pismo Beach, CA, 2012 - Ongoing** – Mr. Fussel is currently serving as the Project Engineer for the design of a “total street” reconstruction of 18 blocks of Shell Beach Road in the City of Pismo Beach. The project entails incorporating a new Class 1 bikeway along an existing Caltrans right-of-way (Highway 101). In addition, the project aims to replace aging utilities, including: a new 12” water line, new 12” reclaimed water line, undergrounding power and communication lines, and new storm drain

**Project Role:**

Project Engineer

**Education:**

California Polytechnic State University, San Luis Obispo.  
B.S. Civil Engineering, 2003

**Registrations/Certifications:**

Registered Professional Engineer  
California No. 70879

Registered Professional Engineer  
Hawaii No. 15600

Registered Professional Land Surveyor  
California No. 9006

Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP)  
Certificate # 20231

LEED® Accredited Professional

**Office:**

San Luis Obispo, California

**Years of Experience:**

Ten

**Years with Tetra Tech:**

Ten

64



**Jason Fussel, PE, PLS, LEED® AP, QSD/QSP**  
Project Engineer/Surveyor

improvements. The project will incorporate new way-finding and streetscape enhancements including: pavement enhancements at crosswalks and intersections, full ADA compliance, street furniture and landscape improvements (incorporating Low Impact Development techniques). Mr. Fussel was responsible for designing the layout for the bike path, curb bulbouts, potable and reclaimed water line, National Environmental Policy Act (NEPA) coordination between the City and Caltrans, in addition to a hydrology analysis.

**Elmer Avenue Phase II Project, City of Los Angeles, Bureau of Engineering, Sun Valley, CA, 2012** – Mr. Fussel was the Engineer of Record responsible for overseeing the design of this important Proposition “O” project for the City of Los Angeles Bureau of Engineering. The Phase II project infrastructure was intended to complement the existing bioswales and two infiltration galleries that were implemented in Phase I of the Elmer Avenue Neighborhood Retrofit Project. Through the incorporation of additional Low Impact Development (LID) infrastructure, the project increased infiltration capacity, recharged the groundwater supply; reduced polluted stormwater runoff into rivers, lakes and oceans; further managed stormwater during rain events; and improved public safety. Tetra Tech worked closely with the Bureau of Engineering (BOE), the Watershed Council, and community residents through numerous design workshops within a very aggressive schedule and within budget.

**Los Angeles Zoo Parking Lot Low Impact Development Project, City of Los Angeles, Bureau of Engineering, Los Angeles, CA, 2011** – Mr. Fussel was Project Engineer / Engineer of Record for this important Proposition “O” project which transformed a standard parking lot into a major opportunity for the City of Los Angeles to demonstrate that water quality improvement and sustainable design can be a part of City’s planning and development efforts. The parking lot project’s goal was to become the Zoo’s first exhibit achieving a “Demonstration on Environmental Sustainability.” Mr. Fussel was responsible for leading the design team for this important Low Impact Development project which included the redesign and repair of the Los Angeles Zoo’s asphalt concrete parking area, replacing it with pervious pavement. The project included a hydrology model of the watershed so Best Management Practices (BMPs) were optimized. Additional services provided include landscape architecture, public outreach, permitting support, interpretive design, cost analysis and value engineering. The project incorporated the latest design strategies for LID and a cross review of the LEED® requirements. In addition, to overseeing the project design components, Mr. Fussel led the Construction Support Services and played a key role in all submittal documents, requests for information and attended weekly construction meetings.

**Peck Park Canyon Stormwater Quality Enhancement Project, City of Los Angeles, Bureau of Engineering, San Pedro, CA, 2011** – Mr. Fussel was Project Engineer/Engineer of Record for this important Proposition “O” project which will improve the quality of stormwater entering and leaving Peck Park Canyon. In addition to reducing erosion and sedimentation, the project provides water quality benefits by reducing the bacteria in the Canyon’s stream and ultimately in the Los Angeles Harbor and San Pedro Bay. Mr. Fussel was responsible for overseeing project design components and incorporating the latest Low Impact Development design strategies in water quality improvement, BMPs, landscape architecture, Leadership in Energy and Environmental Design (LEED), engineering and public outreach. The goal of the project was to improve the quality of stormwater entering and leaving Peck Park Canyon, thereby reducing the bacteria in the Canyon’s stream and in the Los Angeles Harbor. This was achieved through the implementation of bioswales and infiltration strips at the top of the Canyon, using stepped and armored channels, dissipaters and stilling basins to reduce runoff velocities and erosion throughout the remainder of the Park. Also included were reconstruction of trails, passive recreational amenities and interpretive signage. In addition, to overseeing the project design components, Mr. Fussel led the Construction Support Services and played a key role in all submittal documents, requests for information and attended weekly construction meetings.



## Joseph Dietz, P.E., S.E., LEED AP

Project Engineer/Structural

Mr. Dietz has well rounded experience in civil and structural engineering stemming from his involvement in a variety of residential, commercial, educational and federal projects. His experience includes work on both public and private jobs of varying sizes and construction material types.

Mr. Dietz's civil engineering experience includes design of sewer transmission systems, water distribution systems, street and storm drain improvements and grading activities varying from mass grading to final precise grading plans.

To compliment Mr. Dietz's experience in traditional civil engineering practices, his structural engineering experience includes structural retrofits of substandard structures, analysis of existing structures and the design of new structures. Construction materials used for projects include timber, reinforced concrete, pre- and post-tensioned concrete, reinforced masonry and steel.

Mr. Dietz has extensive working knowledge of the California Building Code (CBC), International Building Code (IBC) and their application to civil and structural engineering projects.

### EXPERIENCE

**Alta Madera Drive Pedestrian Overcrossing Replacement, City of Santa Clarita, CA** – Structural engineer responsible for planning, design, and construction phase services to replace the existing pedestrian overcrossing (POC) over Alta Madera Drive. Constructed in 1979, the timber superstructure showed signs of insect infestation, dry rot, and de-lamination of the glue laminated girders. The project team was tasked with defining an approach to replace the decaying structure. During the planning stage of the project, Tetra Tech's team studied the feasibility of repair and replacement alternatives. Tetra Tech provided estimates of probable construction cost, guidance on current design standards, and several design concepts. The preferred alternative consisted of a single-span configuration with a prefabricated steel truss superstructure.

In spring of 2011, Tetra Tech initiated the geotechnical investigation and preparation of plans, specifications, and estimates to replace the structure. Through continued partnership, Tetra Tech and City engineers will soon deliver a project that increases safety and restores alternative access to schools, neighborhood parks, and local businesses in Santa Clarita.

**Bike/Pedestrian Path for Los Angeles River, City of Los Angeles, CA** – Project Engineer for the preparation of Plans, Specifications, and Estimate (PS&E) for a new bike path along the Los Angeles River channel from Winnetka Avenue to Mason Avenue. Also performed construction administration and assistance by assisting the City of Los Angeles in addressing RFIs and review of project submittals.

### Education:

California Polytechnic State University, San Luis Obispo.  
B.S. Architectural Engineering, 2002

### Registrations/Certification

#### S:

Registered Professional Engineer  
California No. 67032  
Nevada No. 17356

Registered Structural Engineer  
California No. S-5251

LEED® Accredited Professional

### Office:

Irvine, California

### Years of Experience:

12

### Years with Tetra Tech:

11



**Joseph Dietz, P.E., S.E., LEED AP**  
Project Engineer/Structural

**Carrizo Drive Pedestrian Overcrossing Replacement, City of Santa Clarita, CA** – Project Manager and Structural engineer responsible charge of planning, design, and construction phase services to replace the existing pedestrian overcrossing (POC) over Carrizo Drive with a single-span configuration with a prefabricated steel truss superstructure. Project task included: geotechnical investigation and report, survey, utility research and coordination, preparation of plans, specifications, and estimates, and construction support.

**Avenue 26 Over Arroyo Seco Channel Seismic Retrofit, Bridge No. 53C-1875, City of Los Angeles, CA, Ongoing** – Mr. Dietz is Project Manager for the bridge retrofit including the preparation of NEPA/CEQA environmental clearance documents, regulatory permitting 1602 (CDFG), 401 (ACOE), 404 (RWQCB), bridge independent structural review, and traffic control.

**Peck Park Canyon Stormwater Quality Enhancement Project, City of Los Angeles Bureau of Engineering, San Pedro, CA** – QA/QC Manager and Structural Engineer for the rehabilitation of natural watersheds, reconstruction of trails, bridges and various other park features to improve water quality. This project for the City of Los Angeles, Bureau of Engineering's Department of Public Works also included planning, layout and design of park trail facilities, signage, utilities, infrastructure and recreational facilities. The project incorporated the latest Low Impact Development design strategies in water quality improvement, BMPs, landscape architecture, and Leadership in Energy and Environmental Design (LEED). This was achieved through the implementation of bioswales and infiltration strips at the top of the Canyon, using stepped and armored channels, dissipaters and stilling basins to reduce runoff velocities and erosion throughout the remainder of the Park. Additional tasks completed included, passive recreational amenities and interpretive signage.

67

**Riverside Dr. near Zoo Dr. Bridge over Los Angeles River, Bridge No. 53C-1298, City of Los Angeles, CA, Ongoing** – With this historic bridge falling below current design standards, Mr. Dietz is managing the completion of environmental documentation and permitting, geotechnical and hydraulic analyses, bridge widening and retrofit, traffic and lighting upgrades, and 100% plans, specifications, and estimates (PS&E) in an effort to fix geometric deficiencies, barrier rail vulnerabilities, structural weaknesses, and Los Angeles River Bicycle Lane impedance issues. Mr. Dietz is coordinating with sub-consultants, stakeholders, and agencies, and is providing regular schedule updates and holding progress meetings to review contract objectives and milestones. This is a federally funded project and plan reviews and approvals by Caltrans District 7 and the Federal Highway Administration (FHWA) are required. This project is currently in the 90% design stage.

**El Paseo Drive Pedestrian Overcrossing Replacement, City of Santa Clarita, CA** –Project Manager and Structural engineer responsible charge of planning, design, and construction phase services to replace the existing pedestrian overcrossing (POC) over El Paseo Drive with a single-span configuration with a prefabricated steel truss superstructure. Project task included: geotechnical investigation and report, survey, utility research and coordination, preparation of plans, specifications, and estimates, and construction support.

**Del Monte Drive Pedestrian Overcrossing Replacement, City of Santa Clarita, CA** – Project Manager and Structural engineer responsible charge of planning, design, and construction phase services to replace the existing pedestrian overcrossing (POC) over Del Monte Drive with a single-span configuration with a prefabricated steel truss superstructure. Project task included: geotechnical investigation and report, survey, utility research and coordination, preparation of plans, specifications, and estimates, and construction support.



## Ira Mark Artz, P.E.

### Hydraulic Analysis Engineer

Mr. Artz has over 30 years of experience in the engineering, management, and planning of water resources projects. Mr. Artz has managed and provided a QA/QC role on large-scale, multi-disciplinary public works projects for municipal and federal agencies. He has managed numerous IDIQ planning contracts for several Corps Districts, with task orders related to project purposes based on technical, economic, and land-use planning opportunities. His engineering and environmental sciences background enabled his past preparation and understanding of hydrology and hydraulic reports, drainage studies and analyses, floodplain analyses, watershed studies, and ecosystem restoration studies.

Prior to joining the private sector, Mr. Artz served as both a Community Planner and Civil Engineer for the Corps of Engineers, Los Angeles District, for ten years. He gained experience in the management, analysis, and coordination of hydraulic, hydrologic, design, environmental, and economic information on civil works flood control projects in all of Southern California and Southern Arizona. While at the Corps, Mr. Artz also assisted the Federal Emergency Management Agency on re-mapping FIRM maps for the Los Angeles River and on damage analysis following a real-time flooding disaster.

Mr. Artz has provided a variety of funding procurement assistance to local municipalities. This includes (1) assistance with grant proposals for state and federal programs covering floodplain management, water supply and conservation, and wildlife restoration, (2) development of legislative language for Federal water resources authorization acts and appropriations bills, and (3) coordination of efforts among local municipalities, stakeholders, and Federal agencies to help initiate study/project efforts.

#### EXPERIENCE

**Los Angeles River Revitalization Master Plan, City of Los Angeles, Los Angeles, California** – Project Manager for this highly-visible effort for the City of Los Angeles. The Plan process developed and considered alternatives for the 32-mile River corridor. The goal of the Master Plan is to create a 20-year blueprint for development and management of the LA River. The 18-month process resulted in a master plan for revitalization of the River for the purposes of habitat development, recreation/open space, water quality, economic development, and fostering a growth in community awareness and pride in the Los Angeles River. The City has kept Tetra Tech under contract for assistance with implementation of the Plan.

**Program Manager, US Army Corps of Engineers, Various Locations in California** - Mr. Artz has been the Program Manager for \$54 million in Planning Contract capacity for the following on-call contracts for the Corps of Engineers: Los Angeles District (six, from 1993 – present); Sacramento District (three, including 2001-2004, 2007-2009, and 2009-present); Albuquerque District (2008-present), Mobile District (2001-2002); and St. Paul District (2002 –

#### Education:

M.S., Civil  
Engineering/Infrastructure  
Management, Stanford  
University, California, 1986

M.A., Geography, University of  
California Los Angeles,  
California, 1979

B.A., Ecosystems Analysis  
University of California Los  
Angeles, California, 1976

#### Registrations/Certifications:

Professional Registered Civil  
Engineer, California. No.  
45467

#### Professional Affiliations:

American Society of Civil  
Engineers

Society of American Military  
Engineers

#### Office:

Irvine, California

#### Years of Experience:

32

#### Years with Tetra Tech:

15





**Ira Mark Artz, P.E.**  
Hydraulic Analysis Engineer

2005). In addition, task orders were managed by him using transferred contract capacity for the Albuquerque, Huntington, Tulsa, and Baltimore Districts. Most recently, for the 2007-2009 Los Angeles District Planning IDIQ, Mr. Artz has provided program management, plan formulation, and/or policy support on the following studies: Tres Rios del Norte, Arroyo Seco, Aliso Creek, San Bernardino Lakes and Streams, Wilson Creek, and Rio Salado.

**Program Manager, Rio Grande Levee Rehabilitation Design and Construction Management Program, US International Boundary and Water Commission, El Paso, Texas** - Program Manager for this on-call contract that has resulted in \$19 million in task orders for design and construction management. Since 2009, Tetra Tech has been supporting the USIBWC by providing design (PS&E) and construction management (CM) services along 200 miles of the Rio Grande levee system from New Mexico to Brownsville, Texas.

**Long-Term Sediment Management Plan for Los Angeles County, California** - Los Angeles County Department of Public Works. Planning review for Tetra Tech's team that provided technical support to the County for the development of a plan for long-term, sustainable management of sediment in the County. Involved analysis and screening of sediment management alternatives, modeling of sluicing at Pacoima Reservoir, and developing a plan for a pilot project for processing of sediment for multiple uses.

**Los Angeles River Ecosystem Restoration Feasibility Study, US Army Corps of Engineers, Los Angeles, California** - Project Manager of this study that is investigating the feasibility of providing habitat restoration in the Los Angeles River within the City of Los Angeles. Mr. Artz has facilitated workshops, provided plan formulation, and managed design engineers, hydraulic engineers, environmental planners, cost estimators, and economists in the evaluation of problems, objectives, and alternative measures for this study.

**Program Implementation Plan for the Foothill Communities Water Supply Reliability Study, Los Angeles and San Bernardino Counties, US Army Corps of Engineers, Los Angeles District** - Project Manager for this Program Implementation Plan (PIP) addressing water supply reliability, water quality, and water system infrastructure enhancement for a 42 city region with more than 2 million residents in LA and San Bernardino Counties. Eight individual alternatives were formulated addressing different needs in the study area; these included extension of a feeder line, construction of a new pipeline interconnect, an injection well program, stormwater capture, new wellfields, and the development of new spreading grounds for infiltration basins. The effort included an environmental analysis, alternative description, cost estimates, and a scope of study for potential spin-off studies in the future. This phase of study was conducted under the "Planning Assistance to States" authority (Section 22 of WRDA 1974, Public Law 93-251, as amended).

**The Piggyback Yard Conceptual Master Plan, Los Angeles, CA** - Provided a technical advisory and conceptual design role for this effort. The Piggyback Yard Vision is a pro bono effort of several firms led by the architectural firm Perkins + Will, on behalf of the Friends of the Los Angeles River. The combined effort created two alternative visions for the large Mission Rail Yard currently owned by Union Pacific in downtown Los Angeles. The effort was coordinated with several agencies including the Corps of Engineers, and will become one of the measures considered for the LA River Ecosystem Feasibility Study, being conducted by the LA District.



**Mazen Kassar, P.E.**  
Project Manager

Mr. Kassar has more than 23 years of experience in electrical engineering and industry standard that include electrical engineering staff management, project management, construction management and supervision, water and wastewater treatment, petro-chemical design, and environmental soil and groundwater treatment. His background includes designing medium and low voltage power distribution, designing instrumentation and control systems for a wide variety of projects, installation of electrical systems for remediation projects, including soil vapor extraction systems and groundwater pump-and-treat systems. Other experience includes, working with utility companies to provide new electrical service to new projects, working with local Building and Safety Departments to obtain Plan Check and construction permits, field trouble shooting of electrical and mechanical systems, system commissioning and startup, problem solving, and managing an operation and maintenance department. He has strong knowledge in MS Office and AutoCAD.

**EXPERIENCE**

**Water Supply/Treatment**

**Lakewood Plant 13 Project, Lakewood, CA, 2013**

Managing the electrical design for Plant 13 pump station upgrade. The design consists of replacing the plant old MCC with new outdoor NEMA 3R MCC, installing new conduits and wires to the new pumps, and reinstalling the existing control and telemetry system. This replacement upgrade requires interfacing with Southern California Edison (SCE) and relocating the existing ATS.

**Lakewood Well No. 22 Project, Lakewood, CA, 2013**

Managing the electrical design for well no. 22 pump upgrade. The design consists of replacing the old well pump VFD with new one and rewiring the new well pump.

**Fueling Facility Upgrade Project, Des Moines AFB, Des Moines, IA, 2012**

Currently working on upgrading jet fuel and Mogas fueling facilities with new electrical lighting, canopy lightening protection system, fuel pumps emergency shut off switches and electrically heated emergency shower and eye wash stations.

**Fueling Facility Upgrade Project, Grissom AFB, Grissom, IN, 2012**

Currently working on upgrading jet fuel fueling facility with new electrical lighting, canopy lightening protection system, fuel pumps emergency shut off switches.

**Fueling Facility Upgrade Project, Air Force Academy, Colorado Springs, CO, 2012**

Currently working on upgrading jet fuel and aviation gas fueling facilities with new electrical lighting, canopy lightening protection system, fuel pumps emergency shut off switches.

**Santa Ana River Interceptor Relocation Project, Orange County Flood Control District, Santa Ana, CA, 2012**

Provided preliminary and final electrical design services for relocation of 19,500 linear feet segment of 54-inch trunk interceptor, 6,000 linear feet of 15- and 18-inch sewer mains, flow metering station and the decommissioning of the existing trunk

**Project Role:**

Project Manager

**Education:**

B.S., Electrical Engineering,  
California State University,  
Long Beach, 1990

**Registrations/Certifications:**

Professional Electrical  
Engineer

California, 1998, No. 15809

General Construction, Class B  
California, 2008, No. 777845

Contractor - C-10 Electrical,  
California Class C – Specialty  
2000, No. 777845

**Training and Certifications:**

ETAP Electrical Power  
Modeling

Project Management I & II

Auto CAD 2005

GE and Allen Bradley PLC  
programming

Intellution and Wonderware  
SCADA programming

Vapor e\extraction and  
Groundwater Treatment

OSHA 8-hour Hazardous  
Waste Operations Annual  
Refresher Training, 2012

OSHA 8-hour Hazardous  
Waste Operations Site  
Supervisor Training, 1992

**Professional Affiliations:**

Institute of Electrical and  
Electronics Engineers IEEE

**Office:**

Irvine, California

**Years of Experience:**

23

**Years with Tetra Tech:**

Four

70



**Mazen Kassar, P.E.**  
Project Manager

interceptor segment. The project included the installation of two separate siphons below the Santa Ana River using microtunneling construction method while complying with multiple environmental and permitting constrains.

**Pyrite Canyon Treatment Facility, State of California, Department of Toxic Substances Control, Glen Avon, CA, 2009-2014**

Performed design of electrical power and distribution system for a new treatment facility. The design included sizing solar system to feed the new plant, sizing power equipment like inverters, step up and step down transformers, overhead and underground distribution, switchboard, MCC and cable trays, performing load flow and short circuit studies using ETAP power modeling software.

**BP AF&G Arctic Project, Purdue Bay, Alaska, 2011-2012**

Lead electrical engineer for two large Automation Fire and Gas (AF&G) projects, Flow Station 1 (FS-1) and Flow Station 2 (FS-2). Each flow station consists of multiple modules and each module has many fire alarm sensors and notification devises. The electrical engineering included designing redundant power system to feed Honeywell Fire Safety Manager and its remote panels throughout the flow stations. Redundancy was provided starting on the medium voltage side, adding a set of step down transformers, adding emergency MCC with backup generator system, adding large UPS system, sizing and specifying cables for hazardous locations, and sizing panel boards. The design also included performing area classification, performing calculations and sizing UPS equipment like batteries, inverters and chargers. Responsibility included directing and instructing electrical engineers and designers to provide complete electrical design including construction activity planning.

**SCADA Project, City of San Clemente, San Clemente, CA, 2011**

Designed 35 water and wastewater facilities that included reservoirs, pumping stations, turnouts, lift stations and utilities interties. The design included replacing the existing PLC with new Alan Bradley, Compact Logix PLC, replacing the operator interface terminal (OIT) with new AB panel view and upgrading the old radio communication system with the 900MHZ Ethernet radios and antennas.

**Solar System Design Review, Multi Sites, Recurrent Energy, 2010**

Performed solar system design review for Recurrent Energy Company throughout California for Kaiser Permanente facilities. The review process included verifying solar panel size and quantities, inverters size and quantities, combiner and recombiner boxes sizes, system protection and fusing, and cabling system sizing.

**Michelson Water Reclamation Plant, Phase II Improvements, Irvine Ranch Water District, Irvine, CA, 2009**

Reviewed electrical design and assisted in reviewing submittals and answering RFIs. Performed modification to the electrical design as needed based on construction and field activities.

**Total, Deep Conversion Project, Port Arthur, Texas, 2008**

Area lead engineer for a large project. The electrical design consisted of providing power to new Coker Unit, Sulfur Recovery Unit (SRU), and Distillate Hydrotreater (DHT) Unit. The design consisted of working with 13.8kV, 4160V and 480V system, sizing transformers and switchgears, and sizing medium and low voltage MCCs. Managed design changes and change orders for the electrical engineering task.

**Taxiway 'MIKE' Bypass Road, US Navy, NAVFAC Southwest, Desert IPT, Travis Air Force Base, Fairfield, CA, 2007**

Managed the electrical design for a two lane road with shoulders to bypass an existing taxiway. The project included the design of electrical lighting along the road and bringing power from three separate sources using medium voltage and low voltage equipment. The design also included a site layout that conformed to the Anti-Terrorism Force Protection physical security requirements and Security Forces requirements.



**Dan Helt, PE, PLS**  
Surveying

Mr. Helt is experienced in both civil engineering and land surveying aspects of construction and land development projects. He has designed and prepared both small and large federal, municipal, commercial, and residential grading and drainage plans, as well as utility plans and project associated public improvement plans. Mr. Helt has prepared a variety of hydrology and hydraulic documents for review of analysis and compliance with codes and standards. He has prepared and reviewed specification, calculations and other basis of design documents.

Mr. Helt has performed field boundary and topographic surveys, as well as construction staking, certification and monitoring, and ALTA/ACSM surveys. He has considerable experience researching boundary and chain of title information, and preparing legal descriptions. Mr. Helt has extensive knowledge in the use of Autodesk’s Civil 3D software for both conceptual and detailed design studies, as well as the production of construction plan sets. He also has significant experience using Hydraflow and Hydraflow Express for flow modeling and storm routing and HEC-RAS, USEPA SWMM and Storm and Sanitary Analysis for storm water system design and modeling.

**EXPERIENCE**

**Shell Beach Road Streetscape Phase I Project, City of Pismo Beach, Pismo Beach, CA** – Mr. Helt is currently serving as the Project Engineer and Surveyor for the design of a “total street” reconstruction of 18 blocks of Shell Beach Road in the City of Pismo Beach. The project entails incorporating a new Class 1 Bikeway along an existing Caltrans right-of-way (Highway 1). In addition, the project aims to replace aging utilities, including: a new 10” water line, new 8” reclaimed water line, undergrounding power and comm. lines, and new storm drain improvements. The project will incorporate new way-finding and streetscape enhancements including: pavement enhancements at crosswalks and intersections, full ADA compliance, street furniture and landscape improvements (incorporating Low Impact Development techniques).

**Riverside Dr. near Zoo Dr. Bridge over Los Angeles River, Bridge No. 53C-1298, City of Los Angeles Bureau of Engineering, Los Angeles, CA** – Tetra Tech provided final environmental documentation and processing, hydraulic analysis, 100% Plans Specifications & Estimates (PS&E), and design support during Right-of-Way and Construction phases for the seismic retrofit and widening of Riverside Dr. Near Zoo Dr. Bridge Over Los Angeles River. With this historic bridge falling below current design standards, the goal of the project is to correct existing geometrical design deficiencies, address seismic vulnerabilities, improve pedestrian and bicycle travel, and preserve the historic character of the bridge. The project also includes the addition of a Class I bicycle undercrossing to link eastern and western segments of the Los Angeles River bike trail. Mr. Helt was Project Surveyor responsible for field surveys for the project.

**Education:**

B.S., Civil Engineering, Cal Poly, San Luis Obispo, 2003

**Registrations/Certifications:**

Professional Engineer, California, No.C69347

Professional Land Surveyor, California, No.8925

**Professional Affiliations:**

American Society of Civil Engineers

California Land Surveyors Association

**Office:**

San Luis Obispo, CA

**Years of Experience:**

Nine

**Years with Tetra Tech:**

Two



**Dan Helt, PE, PLS**  
Surveying

**Elmer Paseo Stormwater Improvements, Council for Watershed Health, Sun Valley, CA** – Mr. Helt served as Project Engineer and Surveyor responsible for performing field reconnaissance and detailed design. The final design for Elmer Paseo not only addresses runoff management and infiltration, but is also sustainable, aesthetically pleasing, and incorporates community needs. During the research phase, Tetra Tech performed various analyses including hydrology, stormwater pollutant characterization, and BMP modeling to determine the optimal types and configuration of BMPs to deliver the best possible performance while minimizing project costs. Tetra Tech reviewed all existing documentation, design drawings, reports and analyses available from Phase I of the project. All previous hydrologic analysis and infiltration tests were incorporated to determine the design capacity. The final design includes a bioretention swale that filters and conveys stormwater to an infiltration trench that runs down the center of the Paseo for its entire length. In addition, pervious concrete was used in the path to incorporate an “educational” BMP to illustrate how such pavement can be incorporated in everyday uses. The final design will infiltrate over 5 acre feet of stormwater per year.

**Elmer Avenue Phase II Project, City of Los Angeles, Bureau of Engineering, Sun Valley, CA** – Mr. Helt was the Project Engineer and Surveyor responsible for field reconnaissance and design of this important Proposition O project. The Phase II project improvements consisted of two additional catch basins and hydrodynamic separators, and the regrading of an intersection. The new infrastructure was intended to complement the existing bioswales and two infiltration galleries that were implemented in Phase I of the project. Through the incorporation of additional Low Impact Development (LID) infrastructure, the project increased infiltration capacity; recharged to the groundwater supply; reduced polluted stormwater runoff into rivers, lakes and oceans; further managed stormwater during rain events; and improved public safety. Most importantly for this project, sediment is now collected upstream from the previously installed infiltration galleries, reducing the potential for clogging and thus increasing the life span of the galleries. A thorough site investigation, topographic survey, and hydraulic calculations were performed for the entire Elmer Avenue watershed area. Tetra Tech worked closely with the Bureau of Engineering (BOE), the Watershed Council, and community residents through numerous design workshops to create a final design that achieved the goal of providing pre-treatment to the existing infiltration galleries, within a very aggressive schedule and within budget. The final design includes two new catch basins and storm drain piping that collects and conveys additional stormwater to the infiltration galleries. Hydrodynamic separators will be installed at each end of Elmer Avenue. These separators will collect and prevent sediment from entering the infiltration galleries. A pavement overlay will also be provided at the intersection of Stagg Street and Fair Avenue to direct additional flow to the galleries.

**Air National Guard Installation Boundary Mapping, National Guard Bureau, Various Bases** – Mr. Helt is currently serving as the Survey Project Manager and Surveyor of Record for the southwestern portion of this national contract to establish boundary line locations, set monuments and file the appropriate documentation for existing Air National Guard bases across the United States. Some of the contracted tasks include courthouse and facility records research, and field reconnaissance. Tetra Tech will be required to field tie existing property and controlling corners to geodetic coordinates. Additional tasks include data reduction, boundary resolution, calculations, mapping and setting final corner monuments for the subject properties. Of particular importance to the ANG is the organization of record information, along with the conversion and/or cataloguing of that information and the established boundary in GIS for use with SDSFIE 3.0, as mandated by the Air Force. Tetra Tech will also be responsible for helping the ANG develop a standard operating procedure so that personnel can better manage their GIS records keeping, as the real property boundaries associated with their various facilities and assets change in the future.



**Molly Mell, P.E.**  
QA/QC Manager

Ms. Mell has a diverse base of knowledge of the elements necessary to successfully execute large scale multi-disciplinary projects. During her 20 years in the civil engineering field, she has had significant roles providing management, coordination and detailed design on a broad range of project types. As a project manager she has proven experience to pull together successful teams to complete these projects on schedule and on budget. Ms. Mell has strong leadership capabilities in team development, communication within the team, and builds strong client relationships through communication.

Her civil engineering experience includes:

- Freeway interchange improvement projects
- Bikeway/ Pedestrian Trail Design
- Roadway extensions and widening
- Street improvements
- Bridge reconstruction and widening
- Site development
- Utility design
- Hydrology and storm drain design
- Storm drain master plan preparation
- Large scale fiber optic network design and construction

Her project management experience includes both public and private projects of varying size that include multiple sources of funding including: Federal, state and local transportation funding, Security Grant Funding, and private sources.

Her management skills include project scheduling, cost estimating, building consensus, strong presentation skills and innovative thinking. Ms. Mell has been a valuable asset in project execution for her clients.

**EXPERIENCE**

**Bike/Pedestrian Path for Los Angeles River, City of Los Angeles, CA –** Project Director for the preparation of Plans, Specifications, and Estimate (PS&E) for a new bike path along the Los Angeles River channel from Winnetka Avenue to Mason Avenue. The proposed bikepath is inside the channel, requiring modifications to the channel cross section and retaining wall design. Tetra Tech is preparing a 2-D hydraulic model to study the effects the new section will have on waving and ramping patterns, in accordance with the Army Corps of Engineers requirements. The project also includes bikeway plans and profiles, signing and striping, lighting plans, and decorative path construction. An artistic rendering was also prepared to illustrate how the completed project will appear.

**Alta Madera Drive Pedestrian Overcrossing Replacement, City of Santa Clarita, CA –** As the Project Director Ms. Mell oversaw the planning, design, and construction phase services to replace the existing pedestrian overcrossing (POC) over Alta Madera Drive. Constructed in 1979, the timber superstructure showed signs of insect infestation, dry rot, and de-lamination of the glue laminated girders. The project team was tasked with defining an approach to

**Education:**

University of Redlands  
B.S., Civil Engineering, 1992

**Registrations/Certifications:**

Registered Professional Engineer  
California No. C59104

Project Management:  
PSMJ – PM Workshop

Tetra Tech Project Management Series:  
- Completed all Levels  
- Seminars for Staff

**PROFESSIONAL AFFILIATIONS:**

American Society of Civil Engineers

Women’s Transportation Seminar (WTS)

Institute of Transportation Engineers (ITE)

**Office:**

Long Beach/ Irvine, CA

**Years of Experience:**

20

**Years with Tetra Tech:**

20



**Molly Mell, P.E.**  
QA/QC Manager

replace the decaying structure. During the planning stage of the project, Tetra Tech's team studied the feasibility of repair and replacement alternatives. Tetra Tech provided estimates of probable construction cost, guidance on current design standards, and several design concepts. The selected alternative consisted of a single-span configuration with a prefabricated steel truss superstructure.

**Riverside Dr. Bridge over Los Angeles River, Bridge No. 53C-1298, City of Los Angeles, CA** – Ms. Mell is overseeing the design, coordinating with sub-consultants, stakeholders, and agencies, and is providing regular schedule updates and holding progress meetings to review contract objectives and milestones. This is a federally funded project and requires plan reviews and approvals by Caltrans District 7 and the Federal Highway Administration (FHWA). With this historic bridge falling below current design standards, Ms. Mell is overseeing the completion of environmental documentation and permitting, geotechnical and hydraulic analyses, bridge widening and retrofit, traffic and lighting upgrades, and 100% plans, specifications, and estimates (PS&E) in an effort to fix geometric deficiencies, barrier rail vulnerabilities, structural weaknesses, and Los Angeles River Bicycle Lane impedance issues.

**Carrizo Drive Pedestrian Overcrossing Replacement, City of Santa Clarita, CA** – Project Director for the planning, design, and construction phase to replace the existing pedestrian overcrossing over Carrizo Drive with a single-span configuration with a prefabricated steel truss superstructure. Project task included: geotechnical investigation and report, survey, utility research and coordination, preparation of plans, specifications, and estimates, and construction support.

**Avenue 26 over Arroyo Seco Channel Seismic Retrofit, Bridge No. 53C-1875, City of Los Angeles, CA** – Tetra Tech was contracted by the City of Los Angeles (City) Bridge Improvement Program to seismically retrofit the Avenue 26 Bridge over the Arroyo Seco Channel in Los Angeles, California. This project will rehabilitate an existing bridge to meet current standards for seismic safety. As Project Director, Ms. Mell oversaw project tasks that included environmental, bridge independent check, utility research and coordination, regulatory and other agency approvals, and preparation of final PS&E. The purpose of the proposed project is to seismically retrofit the arch ribs and spandrel columns; these elements of the bridge have been identified as lacking strength which could lead to collapse of the bridge span in a seismic event. The fiber wrapping would be accomplished by erecting scaffolding under the bridge and hand-wrapping the ribs and columns in layers. The Bridge Improvement Program received grants from the Federal Highway Bridge Program, with matching funds from the Seismic Bond (Proposition G, approved in June 1990).

**SR-15 Bikeway Preliminary Engineering, Feasibility Study, and PS&E, City of San Diego, San Diego, CA**– Preliminary engineering, feasibility study, and PS&E for the bikeway system along 7.5-mile segment of SR-15 between Landis Street and Camino del Rio South in Mission Valley. Two alternatives were developed to increase the operations and safety for both bicycle commuters and the recreational users. Tasks included the preparation of conceptual plans, profiles, typical sections; traffic signing/striping plans; environmental and right-of-way impacts; landscape plans; preliminary cost estimates; and a written report outlining methodology, findings and recommendations. Preparing plans, specifications, and cost estimates for final design, including geometric approval drawings.

**Bicycle Bridges over Deep Canyon Channel, City of Indian Wells, Indian Wells, CA** – Preliminary engineering, preparation of environmental documents, design, and PS&E for two new 100-foot long, single-span bikeway bridges at Highway 111 over Deep Canyon Channel. Project also included the approach bikeway improvements, coordination with Caltrans Local Assistance, and compliance with federal funding (TEA-21) requirements. Specific tasks included: site survey and inventory; geotechnical investigations; right-of-way and utility identification; drainage review; permit coordination with Coachella Valley Water District; preparation of bridge and bikeway plans; and preparation of special provisions and construction cost estimates.

**JOHN E. GIFFORD, M.P.A.**  
Program Manager

**HIGHLIGHTS**

**Education**

- MPA, Public Administration, California State University, Northridge, In progress
- LLB, Law, Western State University College of Law, Fullerton, 1990
- A.S., Biology, Chaffey College, 1989
- A.A., Economics, Chaffey College, 1989

**Registrations/Certifications**

- Certificate, "Operation of Wastewater Treatment Plants", University of California, Sacramento
- Certificate, "Advanced Wastewater Treatment Processes", University of California, Sacramento
- Certificate, "Pretreatment Inspection", University of California, Sacramento

**Professional Affiliations**

- American Planning Association
- Association of Environmental Professionals
- Planning Commission

**Awards and Accomplishments**

- Am Jur Award - Contracts, American Bar Association
- Appointed Referee - California State Bar Court
- Small Business of the Year - 2002, Government Services Agency & Small Business Administration
- Accomplishment Citation - FORSCOM Commander
- Accomplishment Citation - Commander Army National Training Center, Fort Irwin
- Accomplishment Citation - Director of Training, US Army Pentagon
- Various Scholarship Awards

**PROFESSIONAL EXPERIENCE**

Mr. Gifford has more than 28 years of experience in managing environmental studies and compliance programs. He has experience with coordination and supervision of complex, controversial programs for local municipalities, county governments and federal agencies. Mr. Gifford is a recognized expert in CEQA/NEPA compliance and Program Management. He is the recipient of various awards for excellence from the Department of Defense for his work on critical infrastructure EIR/EIS documents and for strategic environmental planning programs. Mr. Gifford was recognized by the General Services Administration (GSA) as #1 in customer service for seven consecutive years. He is the author of various articles covering economic trends, community BRAC environmental approaches and legal analysis.

**PROJECT EXPERIENCE**

**Santa Ana River Trail EIR, San Bernardino County Flood Control District, 2010 –** Mr. Gifford was the Project Manager. The Santa Ana River Parkway will connect the Inland Empire from the crest of the San Bernardino Mountains to the Pacific Ocean near Huntington Beach. The parkway concept is that of a linear park that is centered by a Class I bikeway, hiking, and riding trail (or trails) and includes a series of parks connected by the trail. When completed, the parkway will include an approximately 100-mile continuous multi-use trail that connects three counties, Orange, Riverside, and San Bernardino, and multiple cities. Phase III of the project comprised a 3.6 mile stretch from Waterman Avenue to California Street in Redlands. The project included coordination with a number of regulatory agencies and stakeholders and the production of an EIR and various studies.

**Hacienda at Fairview, County of San Bernardino, CA.** Program Manager. Mr. Gifford was responsible for the EIR deliverable. The Specific Plan is approximately 1,557 acres under the jurisdiction of San Bernardino County within the eastern portion of the Town of Apple Valley’s Sphere of Influence. The Specific Plan provides for a master planned residential community with opportunities for equestrian, family oriented, and active adult (55+) lifestyles. Supporting land uses may include, but are not limited to, retail/commercial, parks, recreation, open space, public safety, and public facilities. Mr. Gifford managed the team, subconsultants, and technical reports to complete the EIR. An extensive public outreach campaign was developed and implemented in coordination with the applicant and the County.

**Deep Creek EIR, County of San Bernardino, CA.** Program Manager. Mr. Gifford managed the EIR for the project. The team developed and EIR pursuant to a General

Plan Amendment which changed the official land use district from Agricultural with a primary sign control overlay to Single Family Residential with a 20,000-square foot minimum parcel size; and a Tentative Tract for 202 single-family residential lots on approximately 249 acres in an unincorporated area of San Bernardino County. Mr. Gifford supervised all planning work and the efforts of subconsultants. The work required various permits from the Mojave AQMD, the Lahontan RWQCB and the USACE.



**Clean Water Factory Project, EIS/EIR, City of San Bernardino MWD, CA.** Project Manager. Mr. Gifford managed work and deliverables for the project. He supervised a team of in-house staff and five consulting firms that provided regulatory, biological, cultural, hydrology, air quality, noise, and public outreach. The project included diversion of approximately 24 million gallons per day of treated wastewater from discharge to the Santa Ana River (SAR) for reuse in recharge and/or direct reuse within the City and adjoining agencies. Extensive reuse of recycled water as envisioned by the SBMWD plan results in a reduction in the current level of discharge to the Santa Ana River and involves various impacts to groundwater and infrastructure within the region. Work included all technical studies; biology, hydrology, air quality; and development of the EIS/EIR in coordination with federal and state agencies.

**Eagle Canyon Dam EA/EIR, Riverside County Flood Control & Water Conservation District, CA.** Project Manager. Mr. Gifford supervised the environmental regulatory and analysis process. Eagle Canyon Dam is a large flood control structure intended to protect the communities of Palm Springs and Cathedral City from significant flood events. The Riverside County Flood Control and Water Conservation District needed a consultant to perform environmental services including review and analysis of existing environmental studies and design documents, preparation of environmental documents that meet the requirements of CEQA and NEPA, define and recommend project alternatives, and assist in obtaining appropriate permits and releases to accomplish the work.

**Pacific L.A. Marine Terminal SEIS/SEIR – Port of Los Angeles, ACOE, CA.** QA/QC Manager. Mr. Gifford reviewed all drafts and the final EIS/EIR documents to ensure accuracy, consistency, and completeness. The project involved the construction and operation of facilities on Pier 400 within the Port of Los Angeles. Facilities include a 4-million barrel tank farm, pumping facilities, and conveyance pipelines. The team coordinated with the USACE, POLA, SCAQMD, California Coastal Commission, USFWS, and other state and local agencies.

**PL984 Reclaimed Water Project - U. S. Department of the Interior, Bureau of Reclamation, CA.** EMWD Environmental Department Manager. Mr. Gifford supervised district staff and consultants in the preparation of technical studies and CEQA/NEPA documents. The PL984 project was a Congressional funded program to design and construct a reclaimed water transmission system within the arid portion of southern California. The project consisted of more than 70 miles of pressurized and gravity flow pipeline between four POTWs, three reservoir impoundments, and two wetlands research centers. Work included a programmatic EIS.

**San Jacinto River Use Attainability Study - SJJDA, CA.** Project Manager. Mr. Gifford was in charge of all aspects of the Use Attainability Analysis and Proposal for the San Jacinto River Watershed. He managed the work of various consultants and coordinated the efforts of various private entities and public agencies involved in the study.

**AB3030 Groundwater Basin Management Plan EIR- San Jacinto Groundwater Pumpers Association, CA.** EIR Project Manager. Mr. Gifford supervised district staff and consultants in the preparation of technical studies and CEQA/NEPA documents. The plan included development of injection wells, surface impoundments, desalinization facilities, and water harvesting programs to enhance the uses of water within the 220 square-mile groundwater basin. The team developed a programmatic EIR in support of the Plan. The completed Plan and EIR were used by the State of California as an example and template for subsequent documents submitted in response to AB3030 requirements. (1993-1995)

**JUAN J. HERNANDEZ**  
Senior Biologist/Regulatory Specialist

**HIGHLIGHTS**

**Education**

- B.A., Biology; Humboldt State University, Humboldt, CA 1991

**Training**

- Tortoise Training, Desert Tortoise Council, November 2008
- Wetland Delineation Training, Wetland Training Institute, April 2003
- 1600 Permitting as it relates to CEQA, California Department of Fish and Wildlife (CDFW), June 2001
- California Department of Fish and Wildlife (CDFW) Programs (CESA/1600), Jones and Stokes, December 2001
- California Salmonid Stream Habitat Restoration Training, June 2000
- Habitat Conservation Planning and Natural Community Conservation Planning, Visalia, CA, December 7-8, 2000
- Clean Water Act Section 404 Training Course, San Francisco, CA, December 15-16, 1999
- Department of Fish and Wildlife SCUBA Diving Program, June 1997

**Skills**

- Wetland Delineation
- Lake and Streambed Alteration Agreements
- Section 404 of the Clean Water Act
- Section 401 of the Clean Water Act
- Porter-Cologne Act
- California Endangered Species Act
- Federal Endangered Species Act
- California Environmental Quality Act
- National Environmental Policy Act
- Western Riverside County Multiple Species Habitat Conservation Plan
- Project Management

**PROFESSIONAL EXPERIENCE**

Mr. Hernandez has 24 years of environmental science experience with seven years in the private sector as a regulatory specialist/biologist and 17 years in regulatory permitting, biology, and environmental review with the California Department of Fish and Wildlife (CDFW). As a CDFW employee, Mr. Hernandez was responsible for administering and implementing the Streambed Alteration Agreement Program for western San Bernardino and Riverside counties and coordinating inter-agency project input and participation with the United States Army Corps of Engineers, United States Fish and Wildlife Service and Regional Water Quality Control Boards. Mr. Hernandez has also conducted numerous general biological resource studies, jurisdictional delineations (including wetland delineations) and presence/absence surveys for the desert tortoise.

Currently, Mr. Hernandez is responsible for managing biological studies, jurisdictional delineations, regulatory permitting, and habitat mitigation and monitoring plans for clients requiring biological and regulatory permitting services.

**PROJECT EXPERIENCE**

**Santa Ana River Trails Phase IV, San Bernardino County, CA.** Senior Biologist/Regulatory Specialist. Mr. Hernandez performed biological and jurisdictional studies associated with the proposed project alignment for the Santa Ana River Trails Phase IV. Mr. Hernandez had to identify any biological and regulatory constraints associated with proposed project impacts and work closely with the design team to avoid or minimize those impacts. Mr. Hernandez's experience with regulatory procedures helped the design team avoid many biological constraints by successfully identifying potential issues and advising on more practical solutions prior to any permanent design finalization. Mr. Hernandez successfully coordinated meetings with California Department of Fish and Wildlife, United States Army Corp of Engineers, Regional Water Quality Control Board, United States Fish and Wildlife Service, and California Department of Transportation.

**Castle Mountain Mine 7,600-acre Desert Habitat, San Bernardino County, CA.** Project Manager. Mr. Hernandez completed a Biological Resources Assessment and Jurisdictional Delineation for the purpose of establishing a Conservation Bank to offset impacts to desert tortoise habitat in the Ivanpah Valley. He conducted the studies on 7,000 acres of patented and unpatented claims for Castle Mountain Venture. (February 2010-June 2012)

**Lake Phase IV Expansion, Calimesa, CA.** Project Manager. Mr. Hernandez coordinated the Biological Resources Assessments, Jurisdictional Delineation, MSHCP Compliance, and Regulatory Permitting for Plantation on the Lake Phase IV Expansion. He successfully conducted all necessary biological studies, coordinated

and negotiated with the regulatory agencies, facilitated compliance with the Western Riverside Multiple Species

Habitat Conservation Plan, negotiated acceptable and cost effective mitigation for the client and obtained all state and federal regulatory permits. (March 2011-September 2011)

**U.S. Gypsum Canal Water Pipeline Project, Plaster City, Imperial County, CA.** Project Manager. Mr. Hernandez conducted the Biological Resources Assessment, Jurisdictional Delineation, Wetland Delineations, Habitat Mitigation and Monitoring Plan and obtained all the state and federal regulatory permits. (June 2010-September 2010)

**U.S. Gypsum Quarry, Plaster City, Imperial County, CA.** Project Manager. Mr. Hernandez established 14 acres of restored pygmy cedar habitat as described in the restoration plan, and conducted annual monitoring of the restoration sites for a period of five years. (November 2007-December 2012)

**Copper Mountain College, Joshua Tree, CA.** Project Manager. Mr. Hernandez prepared a Jurisdictional Drainage Delineation for the Copper Mountain College Expansion. (August 2009-August 2009)

**Lake Lindero HOA, Agoura Hills, CA.** Project Manager. Mr. Hernandez prepared a Biological Resources Assessment, Jurisdictional Delineation, and Regulatory Permitting for the Lake Lindero Home Owners Association Lake Dredging Project. He completed all studies and successfully obtained all necessary permits for the project to proceed. (August 2011-February 2012)

**Victorville Sanitary Landfill, San Bernardino County, CA.** Project Manager. Mr. Hernandez completed a desert tortoise presence/absence survey, jurisdictional delineation, and regulatory permitting for the landfill expansion. He also obtained credit for prior mitigation to offset impacts from this project saving the County of San Bernardino thousands of dollars in mitigation costs. (June 2008-December 2008)

**Cedar Glen Water Systems Improvement Project CEQA Initial Study, San Bernardino County, CA.** Project Manager. Mr. Hernandez completed a General biological resources assessment and focused survey for sensitive species plan to obtain information and find cost-effective mitigation measures for the Cedar Glen Water Systems Improvement Project. (March 2008-May 2008)

**Maple Lane Storm Drain and Sidewalk Improvements, County of San Bernardino, CA.** Project Manager. Mr. Hernandez completed a jurisdictional delineation, and obtained the regulatory permits for the Maple Lane Storm Drain and Sidewalk Improvement Project. Mr. Hernandez also successfully established the site as not being southern rubber boa habitat in contradiction to the CDFW asserting that it was. (March 2009-July 2009)

**Air Expressway Sewer Force Main and Lift Station, City of Victorville, CA.** Project Manager. Mr. Hernandez completed a Biological Resources Assessment, Jurisdictional Delineation and Regulatory Permitting for the City of Victorville. (February 2012-July 2013)

**CHARLES CISNEROS, M.S., R.P.A.**  
Staff Cultural Resources Specialist

**HIGHLIGHTS**

**Education**

- M.S., European Archaeology, University of Edinburgh, United Kingdom, 2008
- B.A., Anthropology, California State University, Los Angeles, 2004

**Registrations and Certifications**

- Register of Professional Archaeologists (RPA)
- Orange County Certified Archaeologist
- Riverside County Certified Archaeologist

**BLM Permits**

- BLM-approved Field Director on statewide California permit
- BLM-approved Principal Investigator (cultural) southern Nevada
- BLM-approved Principal Investigator (Historic) statewide Nevada permit

**Training**

- CSULA San Nichols Island Archaeological Field School, Channel Islands, California
- Riverside County Cultural Sensitivity Training (Certificate 338)
- Association of Environmental Professionals, CEQA Basics Workshop
- Echo Park Film Center, Digital Editing: Introduction to Final Cut Pro

**Professional Affiliations**

- Society for American Archaeology
- Society for California Archaeology
- Western States Folklore Society

**PROFESSIONAL EXPERIENCE**

Mr. Cisneros is a registered professional archaeologist with more than eleven years of archaeological assessment and field experience in California and Nevada. He has directed numerous field projects in support of compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA). Mr. Cisneros has participated in a wide range of projects involving archaeological survey, testing, data recovery, monitoring, and laboratory analysis. He is skilled at research and data management, as well as maintaining and organizing digital and print publications. His training and background meet the U.S. Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology and he is a California Energy Commission approved archaeologist for desert archaeology.

Mr. Cisneros specializes in the prehistoric archaeology of the California deserts and the Great Basin. His research interests include ritual use of landscape and sacred geography; applications of new culture-history theory; hunter-gatherer subsistence and technology; and the application of physical science techniques to archaeological questions. He has conducted inventories and analyses of a wide variety of archaeological features and settings, including tool stone prospects and quarries; prehistoric burials; rock art complexes, including parietal art and geoglyphs; and aboriginal trails in desert pavement settings.

**PROJECT EXPERIENCE**

**Century Wilshire Condo Project, Westwood Village, CA.** Lead Archaeologist. Mr. Cisneros directed the onsite cultural resources monitoring. His responsibilities included checking the site for prehistoric and historic cultural resources, preparing daily monitoring logs, advising construction personnel and client, attending to project engineering details, and co-authoring a cultural resources assessment report.

**Lincoln Water Pipeline Project, Los Angeles County, CA.** Crew Chief. Mr. Cisneros performed a cultural resources survey, including a pedestrian survey of the project area, and co-authored a report discussing the findings.

**Los Angeles Police Headquarter Facilities, Los Angeles, CA.** Lead Archaeologist. Mr. Cisneros directed the cultural resources monitoring. His responsibilities involved checking the site for historic artifacts, preparing daily monitoring logs, advising construction crew and client, and attending to project engineering details.

**I-10/Jefferson Street Interchange Improvement Project, Caltrans, Riverside County, CA.** Staff Archaeologist. Mr. Cisneros provided preconstruction archaeological services including, the investigation of the prehistoric areas located near the archaeological sites of CA-RIV-6896 and CA-RIV-6897. He became proverbial with artifacts from the Coachella Valley, plotted and created a map of all surrounding archaeological sites and ancient lake shores, created a

table of radio carbon dates, and reviewed pertinent reports. With construction starting in 2014, this project will demolish the existing bridge and northbound Indio Boulevard overcrossing, and replace it with a new six-lane bridge with bicycle lanes on each side and sidewalk on the northbound side of Jefferson Street. It will also realign and widen portions of Varner Road and add traffic signals at the ramps and intersection of Jefferson Street and Varner Road. Project coordination and open communication were critical and continually maintained with California Department of Transportation (Caltrans) and the County of Riverside. The project was successfully completed according to state and federal guidelines.

**Route 95 Rumble Strip and Re-Stripe Project, California Department of Transportation (Caltrans), San Bernardino County, CA.** Staff Archaeologist. Mr. Cisneros conducted the cultural resources monitoring for a rumble strip and re-striping project located near a culturally sensitive archaeological site. His assignments included monitoring for potential vehicle impacts, preparing daily monitoring logs, advising construction personnel and client, and attending to project engineering details. This project included the installation of rumble strips along Route 95. Project coordination and open communication were critical and continually maintained with Caltrans and the County of San Bernardino. The project was successfully completed according to state and federal guidelines.

**Kramer Junction Project, California Department of Transportation (Caltrans), San Bernardino County, CA.** Staff Archaeologist. Mr. Cisneros participated in a survey focused on the Caltrans rumble strip project located near the town of Kramer, California. His tasks included checking the project area for prehistoric and historic cultural resources, GPS mapping, site recordation, and basic logistics. This project increased the separation of slow moving vehicles, separating local and regional traffic, as well as train and vehicular traffic. Caltrans wanted to reduce accidents brought on by the convergence of SR-58 and US-395 traffic. Project coordination and open communication were critical and continually maintained with Caltrans and the County of San Bernardino. The project was successfully completed according to state and federal guidelines.

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THAT INSPIRE.**

**USING TECHNOLOGIES  
THAT SUSTAIN.**

**CREATING PLACES  
THAT MATTER.**

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